

### **REMARKS/ARGUMENTS**

These remarks are made in response to the Office Action of November 28, 2007 (Office Action). As this response is timely filed within the 3-month shortened statutory period, no fee is believed due. However, the Examiner is expressly authorized to charge any deficiencies to Deposit Account No. 50-0951.

In the Office Action, Claims 1-4, 7-10, 13, and 14 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent 5,225,981 to Yokogawa (hereinafter Yokogawa). Claims 5, 6, 12, 15, and 16 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Yokogawa. Claims 1, 3, 5, 7, 8, 10, 13, and 15 were rejected under 35 U.S.C. §112, second paragraph. Claims 6, 9, 15, and 16 were rejected under 35 U.S.C. §112, first paragraph.

Although Applicants respectfully disagree with the rejections, Applicants nevertheless have amended certain claims so as to expedite prosecution of the present application by emphasizing certain aspects of the invention. Applicants respectfully note, however, that the amendments are not intended as, and should not be interpreted as, the surrender of any subject matter. Accordingly, Applicants respectfully reserve the right to present the original version of any of the amended claims in any future divisional or continuation applications from the present application.

The claim amendments, as discussed herein, are fully supported throughout the Specification. No new matter has been introduced by virtue of any of the claim amendments.

### **Rejections Under 35 U.S.C. §112**

The claim amendments also address the ambiguities asserted at pages 4 through 9 of the Office Action. Applicants confess to being more than a little perplexed that almost without exception the terms deemed to be ambiguous in the Office Action are identical to

those initially presented without objection in the first Office Action. Applicants would have much preferred to address these issues earlier rather than in response to a final Office Action. Nonetheless, Applicants have amended the claims to avoid the use of those terms now deemed to be ambiguous. As amended, the claims clarify certain aspects without altering the scope of the claims, while also accentuating the differences between the claimed features and the prior art.

### *Claim Amendments*

The claims are directed to techniques for morphological analysis, typified by the analyzer features recited in amended Claim 1. The analyzer can include a dictionary unit in which is stored token information. The token information can comprise one or more attribute flags. (See, e.g., Specification, paragraph [0052], lines 1-4.)

The analyzer can further include a token list generating unit for referencing the token information in the dictionary unit, extracting tokens that can form natural language text from the input text string, and registering the extracted tokens in a token list. Additionally the analyzer can include a token string selecting unit for selecting optimum token strings for composing the natural language text on the basis of the token list generated by the token list generating unit.

The analyzer, more particularly, can be configured to accept a setting command from a user interface of an application using the analyzer. (See, e.g., Specification, paragraph [0043], lines 1-5; paragraph [0044], lines 1-2; paragraph [0058], lines 1-9; see also FIG. 6, particularly steps 606 and 607.)

Moreover, the token list generating unit of the analyzer can be configured to register an extracted token that corresponds to a complex word only if the setting command indicates that complex words are not to be decomposed. (See, e.g., paragraph [0044], lines 1-9; paragraph [0045], lines 1-7; paragraph [0047], lines 1-7; and paragraph

[0049], lines 1-8 .)

According to one embodiment, the token information includes one or more stored tokens. Additionally, the token information can include attribution flags that are specifically decomposition flags corresponding to the stored tokens. (See, e.g., Specification, paragraph [0052], lines 1-4.) With this embodiment, the token list generating unit can be configured to register an extracted token that corresponds to a stored token only if the decomposition flag indicates that the stored token is not decomposable. (See, e.g., paragraph [0058], lines 1-9, describing the token list generating unit in the context of a set of operations performed; see also FIG. 6.)

### **The Claims Define Over Yokogawa**

Applicants respectfully submit that Yokogawa fails to teach or suggest every feature recited in the claims. For example, Yokogawa does not contemplate a setting command, as recited in independent Claims 1, 5, 7, 10, 12, 13, and 15. The setting command is set by and accepted from the user interface of a distinct application. It determines whether or not a token corresponding to a complex word is to be registered on a token list.

As noted in the Office Action, Yokogawa provides a "preference flag." Yokogawa's preference flag, however, does not correspond to the recited setting command and does not lead to the same performance achieved using Applicants' setting command. Nor is Yokogawa's preference flag comparable to Applicants decomposition flag, recited in dependent Claims 3, 6, and 8.

Firstly, Yokogawa's preference flag indicates only a coupling *between* words:

"The word dictionary 1018 stores therein grammatical information such as a part of speech and inflection for the entry of each of the words, as well as a highest preference flag as shown in FIG. 3 for the example of the entry

information. The dictionary is referred as a dictionary file with a highest preference flag. "The highest preference flag" is a flag indicating the extent of coupling between words contained in a compound word or phrase constituting the dictionary entry, in which "0" indicates a weak coupling or no coupling, while "1" indicates a strong coupling. In this case, usage as a phrase is estimated for a compound word or phrase judged to have a strong coupling, otherwise the possibility for the usage as individual words is also considered in parallel.

As exemplified in FIG. 3, each of the entries in the word dictionary 1018 is arranged respectively for the compound word, phrase and individual words constituting them, not making a difference between the individual words and the compound word or phrase. Further, each inflection form constitutes each are entry. If there are a plurality of inflection forms, they are registered respectively as different entries. The type of the inflection is displayed in the inflection section. The situation is similar to the part of speech, in which the registration is allowed for a plurality of part of speech and part of speech information is contained for each of them. As other information, countability or uncountability for a noun, transitive or intransitive of a verb, or translated word, etc. are registered.

For instance, "get" is an infinitive form of a verb and the highest preference flag is "0". The phrase "get up" is a phrase for an infinitive verb and its highest preference flag is "1". Further, a preposition group "up to" has the most reference flag of "1", but a noun group "white house" as the compound word has the highest preference flag of "0" and thus the latter shows that the coupling degree between the words is low. In the figure, the

symbol " " shows a vacant character. (Col. 12, lines 23-61; see also Col. 13, lines 34-37)"

Accordingly, Yokogawa does not contemplate word complexity, but rather only the strength of coupling between words.

More fundamentally, however, Yokogawa's preference flag is registered in a token list and used in the token string selecting unit. Inevitably, those tokens associated with the "highest" preference flag are always selected because of the corresponding high coupling. This is also fundamentally different from the recited features. Applicants' setting command is accepted from an application, not included in a dictionary unit. The setting command can dictate that a complex word, otherwise decomposable, is not decomposed into constituent tokens that would be registered.

Moreover, the setting command imposes an additional condition that Yokogawa does not provide. With Yokogawa only the preference flag is taken into account. With Applicants' setting command, an application can dictate that even if a word is otherwise decomposable, the word is not to be decomposed into constituent tokens. Yokogawa does not provide such an additional conditioning in its morphological analysis.

Accordingly, Yokogawa fails to teach or even suggest every feature recited in Claims 1, 5, 7, 10, 12, 13, and 15. Applicants respectfully submit, therefore, that Claims 1, 5, 7, 10, 12, 13, and 15 each define over the prior art. Applicants further respectfully submit that whereas each of the remaining claims depends from Claim 1, 5, 7, 10, 12, 13, or 15 while reciting additional features, each of the dependent claims likewise defines over the prior art.

### **CONCLUSION**

Applicants believe that this application is now in full condition for allowance,

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which action is respectfully requested. Applicants request that the Examiner call the undersigned if clarification is needed on any matter within this Amendment, or if the Examiner believes a telephone interview would expedite the prosecution of the subject application to completion.

Respectfully submitted,

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